



# Morbidity and Mortality

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WEEKLY  
REPORTFor  
Week Ending  
February 15, 1969

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## EPIDEMIOLOGIC NOTES AND REPORTS

## MEASLES - Wake County, North Carolina

Between Jan. 4 and Feb. 13, 1969, 36 cases of measles were investigated in Wake County in contrast to 1968 when only one case was reported from the county. The first case with onset on January 4 was a 5-year-old girl, who with her sister, attended school in Norfolk, Virginia.\* On Dec. 28, 1968, they returned to their home in Wake County. On January 8, the sister of the first patient also developed measles. Neither child had a history of measles or measles immunization. Serum from each obtained on January 22 had a titer of 1:32 to rubeola but no titer to rubella.

On January 3, the two girls had visited overnight in the home of a family with five boys, ages 7 to 12 years. The boys attended school the week of January 6, and on

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January 11, the four younger boys developed cough, coryza, conjunctivitis, rash, and fever. No Koplik spots were seen by their physician, but rubeola was diagnosed. The 12-year-old boy, who was not at home the night the two girls visited, developed measles on January 16. Subsequently, 29 other children in the county developed measles. The majority of these children had not seen a private physician prior to their measles illness and none were known to have received measles vaccine.

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TABLE I. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

(Cumulative totals include revised and delayed reports through previous weeks)

DISEASE	7th WEEK ENDED		MEDIAN 1964 - 1968	CUMULATIVE, FIRST 7 WEEKS		
	February 15, 1969	February 17, 1968		1969	1968	MEDIAN 1964 - 1968
Aseptic meningitis	45	28	24	196	186	186
Brucellosis	1	1	4	8	6	25
Diphtheria	1	—	3	19	12	22
Encephalitis, primary:						
Arthropod-borne & unspecified	28	17	25	150	101	164
Encephalitis, post-infectious	6	8	10	32	58	68
Hepatitis, serum	89	60	872	660	453	5,620
Hepatitis, infectious	982	812	82	5,821	5,559	41
Malaria	25	29	6	268	307	40,466
Measles (rubeola)	508	513	7,444	2,515	3,497	496
Meningococcal infections, total	78	82	82	545	581	—
Civilian	75	78	—	522	552	—
Military	3	4	—	23	29	—
Mumps	2,261	5,070	—	14,847	32,818	—
Poliomyelitis, total	1	—	—	2	—	2
Paralytic	1	—	—	2	—	1
Rubella (German measles)	838	1,003	—	3,792	4,583	—
Streptococcal sore throat & scarlet fever	11,202	10,971	12,023	75,240	79,091	74,792
Tetanus	4	3	4	12	13	21
Tularemia	1	—	3	10	12	28
Typhoid fever	7	2	4	32	25	38
Typhus, tick-borne (Rky. Mt. spotted fever)	—	—	—	1	3	6
Rabies in animals	70	58	67	410	500	506

TABLE II. NOTIFIABLE DISEASES OF LOW FREQUENCY

	Cum.		Cum.
Anthrax:	—	Rabies in man:	—
Botulism:	—	Rubella congenital syndrome:	—
Leptospirosis:	4	Trichinosis: N.Y. Upstate-1	12
Plague:	—	Typhus, murine: Tex.-1	1
Psittacosis: Md.-1	5		

## MEASLES — (Continued from front page)

The county medical society and health department sent a letter to all parents through the elementary schools about the potential epidemic and recommended that immunization be sought from private physicians or the health department. During the week of January 27, 200-250 children were immunized at the health department; the number immunized by private physicians is not known.

(Reported by Millard Bethel, M.D., and Jane Wooten, M.D., Wake County Health Department; J. N. MacCormack, M.D., Consultant in Communicable Disease, and Martin P. Hines, D.V.M., Director, Division of Epidemiology, North Carolina State Board of Health; and two EIS Officers.)

\*From Dec. 1, 1968, through Feb. 8, 1969, 60 cases of measles were reported from Norfolk, Virginia.

## A CASE OF ORF — Lahoma, Oklahoma

In Lahoma, a 39-year-old rancher saw his physician on Oct. 10, 1968, because of axillary lymphadenopathy and a granulomatous lesion that he had had for 1 week on the dorsum of his left index finger. The lesion was 15-20 mm in diameter with a raised edge and necrotic base. Because the patient had recently sorted sheep and treated a lamb with "sore mouth disease," the differential diagnoses included anthrax, tularemia, and orf.<sup>1</sup> The man received 300,000 units of penicillin G suspension I.M. on October 10, and the lesion healed within 3 weeks. Initial tests on skin scrapings for vaccinia and paravaccinia viruses and complement fixation tests on a single acute serum for contagious ecthyma virus were negative. However, orf was confirmed when *ecthyma contagiosum* virus was detected by the fluorescent antibody technique on third and fourth

passages on embryonic bovine tracheal and lamb kidney cell cultures.

(Reported by Avery B. Wight, M.D., Physician, Enid, Oklahoma; Cecil R. Reinstein, M.D., Medical Director, Garfield County Health Department; Karl Reinhart, D.V.M., Dean, Oklahoma State University School of Veterinary Medicine; R. LeRoy Carpenter, M.D., Director, Division of Epidemiology, Oklahoma State Department of Health; National Animal Disease Laboratory, USDA, Ames, Iowa; the Vesicular Disease Laboratory, Laboratory Program, NCDC; and an EIS Officer.)

## Reference:

<sup>1</sup>Leavell, Ullin W., Jr. et al.: Orf, Report of 19 Cases with Clinical and Pathological Observations. *JAMA* 204(8):657-664, May 1968.

## INFLUENZA — United States

During the past week, influenza B activity was reported from Iowa, California, and Alaska and scattered outbreaks of influenza-like disease were reported from Oklahoma. Iowa reported widespread scattered isolated outbreaks of febrile respiratory disease with absenteeism rates of 20 to 50 percent predominantly in elementary and junior high schools. The clinical syndrome was characterized by sore throat and fever with minimal myalgia and some nausea, vomiting, and diarrhea. Recently nine influenza B viral isolates were obtained from 27 throat washings in three communities and one A2/Hong Kong/68 variant was isolated.

In Contra Costa County, California, an outbreak of influenza B occurred during the first week of February. Absenteeism in the elementary and junior high schools ranged from 15 to 30 percent. Clinical illness was characterized by sore throat, malaise, myalgia, cough, and fever. Eight of 10 throat swabs were positive for influenza B.

In Anchorage, influenza B was recently documented when 12 influenza B isolates and two influenza A2 isolates were obtained from 25 throat washings. The two A2 isolates and one of the B isolates were from the same school and the remaining B isolates were from a military population and one other school. The 15 to 20 percent absenteeism rates reported over the last several weeks in some schools in Anchorage were higher than those reported during the previous influenza activity in October,

but the illnesses, characterized by fever, cough, and myalgia, were no more severe. In the city of Klawock on Prince of Wales Island (population 183) in southeastern Alaska, 155 cases of influenza-like disease were reported and four isolates of influenza B were obtained from 11 specimens. Similar high attack rates occurred in rural communities in Alaska in the 1957-58 and 1961 influenza epidemics.

Influenza B isolates from Washington and Iowa have been confirmed at the International Influenza Center for the Americas. No major differences were detected between these isolates and the reference B/Massachusetts/3/66 strain.

Isolated outbreaks of influenza-like disease characterized by fever, sore throat, headache, and minimal cough and myalgia, were recently reported in Oklahoma City and two counties. Schools in the two counties were closed and schools in Oklahoma City had absenteeism rates of 20-25 percent. Recent outbreaks in the northeastern portion of Oklahoma represented late occurrence of influenza A2/Hong Kong/68.

A2/Hong Kong/68 influenza was documented in Oklahoma City in December and influenza B was documented by fourfold rises in titer in two cases in December and January. Laboratory documentation and epidemiologic information on the current outbreaks are pending.

(Reported by Arnold M. Reeve, M.D., Chief, Preventive Medical Service, Iowa State Department of Health; W. J.

Hausler, Jr., Ph.D., Director, and Yau Wai Wong, Chief, Virology Section, Iowa State Hygiene Laboratory; Philip K. Condit, M.D., Chief, Bureau of Communicable Diseases, California State Department of Health; Donald K. Freedman, Director, Division of Public Health, Alaska Department of Health and Welfare; Elmer Feltz, M.D., Chief, Virology Section, Arctic Health Research Center, College, Alaska; R. LeRoy Carpenter, M.D., Director, Division of

Epidemiology, Oklahoma State Department of Health; Marion K. Cooney, Ph.D., Assistant Professor, School of Medicine, University of Washington, Seattle; WHO International Influenza Center for the Americas, Atlanta; Ecological Investigations Program, NCDC, Anchorage; Respiratory Virus Infections Unit, Laboratory Program, and Respiratory Disease Unit, Viral Diseases Section, Epidemiology Program, NCDC; and EIS Officers.)

### TRICHINOSIS FROM BEAR MEAT – Alaska

In Alaska, in July and August 1968, three persons developed clinical trichinosis and five others had serologic evidence of infection after ingestion of bear meat. Symptoms for the clinically ill persons included fever, myalgia, vomiting, diarrhea, periorbital edema, and muscle ache. In addition, one patient had a generalized maculopapular rash. All three recovered after therapy with thiabendazole.

The incriminated meat was from two black bears killed on June 6. The meat from Bear 1 was frozen in two home freezers that could maintain a minimum temperature of 0°F. Then it was served at meals on June 28, July 7, and July 11 (Figure 1). The meat served on June 28 was "well-cooked" on a charcoal grill while that served on July 11 was cubed and sauteed in butter and was described as "pink in the center." All five guests of G.K., Sr., who ate the meat on June 28 had clinical and/or serologic evidence of *Trichinella spiralis* infection. Three of these persons ate meat from Bear 1 again on July 11. One other person at the July 11 meal who had not eaten the

June 28 meal also became ill. No persons at the July 7 meal became ill.

The meat from Bear 2 was cut into stew meat and chops, aged for 5-6 days, flash-frozen in a commercial locker at -25°F, and then stored at 0°F. It was served at five meals. Although no one at these meals developed clinical illness, two had serologic evidence of *T. spiralis* infection. The charcoal card flocculation test for trichinosis was used to identify the symptomatic and asymptomatic infections.

Microscopic examination of meat samples from both bears demonstrated heavy *T. spiralis* infections (Table 1). Pepsin hydrochloric acid digestion in the laboratory of the meat 81 days after the death of each animal showed definitive sluggish movement of larvae in the meat from Bear 1 and no larval movement in the meat from Bear 2. The larvae in Bear 2 showed no signs of calcification.

All 30 persons who had consumed the bear meat were contacted, symptomatic persons were treated, and the other persons maintained under surveillance for illness for 30 days. All the remaining meat was destroyed under the supervision of the USDA in Anchorage.

Figure 1  
INCIDENCE OF TRICHINOSIS IN PERSONS  
EATING INFECTED BEAR MEAT BY DATE OF MEAL

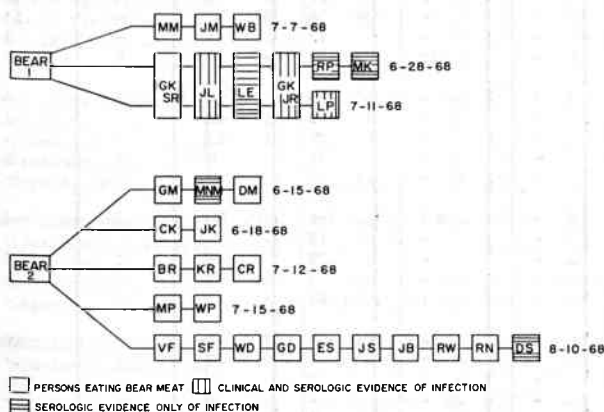


Table 1  
Larvae per Gram of Bear Meat

Animal	Origin of Sample	Larvae per Gram
Bear 1	Hind Quarter	110
Bear 2	Chops	80
Bear 2	Stew Meat	190

(Reported by Donald K. Freedman, M.D., Director, Division of Public Health, and Elizabeth Towere, M.D., South-central Regional Health Officer, Alaska Department of Health and Welfare; Keith Brownsberger, M.D., Anchorage; Harold White, D.V.M., USDA, Animal Health Division, Anchorage; the Arctic Health Research Center, Anchorage; the Ecological Investigations Program, NCDC, Anchorage; and one EIS Officer.)

### TRICHINOSIS – Wisconsin

In May 1968 in New Berlin, Wisconsin, a family of eight became ill with a "flu-like" disease characterized by diarrhea, fever, and muscle aches. The mother had severe symptoms and was hospitalized. Clinical examination of all eight family members revealed marked eosinophilia. All were treated symptomatically by their physician,

and although the illness was undiagnosed at the time, all members including the mother seemed to recover. Approximately 3 weeks later, the 36-year-old father had an apparent stroke resulting in aphasia and right-sided hemiplegia. Periorbital edema and marked eosinophilia

(Continued on page 60)

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED  
FEBRUARY 15, 1969 AND FEBRUARY 17, 1968 (7th WEEK)

AREA	ASEPTIC MENIN- GITIS	BRUCEL- LOSIS	DIPHTHERIA	ENCEPHALITIS		Post- Infectious	HEPATITIS		MALARIA		
				Primary including unsp. cases			Serum	Infectious			
				1969	1968		1969	1969			1969
UNITED STATES...	45	1	1	28	17	6	89	982	812	25	268
NEW ENGLAND.....	2	-	-	2	3	-	2	71	36	1	20
Maine.*.....	-	-	-	-	-	-	-	4	2	-	-
New Hampshire.....	-	-	-	-	-	-	-	5	-	-	1
Vermont.....	-	-	-	-	-	-	-	5	-	-	-
Massachusetts.....	-	-	-	1	3	-	-	32	17	1	18
Rhode Island.....	-	-	-	1	-	-	1	14	8	-	-
Connecticut.....	2	-	-	-	-	-	1	11	9	-	1
MIDDLE ATLANTIC.....	7	-	-	10	4	1	22	121	90	2	15
New York City.....	1	-	-	-	2	-	15	31	30	-	-
New York, up-State.....	-	-	-	-	-	1	4	38	22	1	3
New Jersey.*.....	5	-	-	6	1	-	1	14	14	1	7
Pennsylvania.....	1	-	-	4	1	-	2	38	24	-	5
EAST NORTH CENTRAL...	6	-	-	3	5	1	3	168	125	3	15
Ohio.....	2	-	-	3	3	1	-	60	38	-	1
Indiana.....	-	-	-	-	-	-	1	12	2	-	-
Illinois.....	-	-	-	-	1	-	-	28	42	2	3
Michigan.....	3	-	-	-	1	-	2	62	35	1	10
Wisconsin.....	1	-	-	-	-	-	-	6	8	-	1
WEST NORTH CENTRAL...	1	-	-	-	-	1	-	43	48	5	20
Minnesota.....	1	-	-	-	-	-	-	9	12	-	-
Iowa.....	-	-	-	-	-	1	-	11	15	-	3
Missouri.....	-	-	-	-	-	-	-	6	9	2	4
North Dakota.....	-	-	-	-	-	-	-	5	2	1	1
South Dakota.....	-	-	-	-	-	-	-	9	3	-	-
Nebraska.....	-	-	-	-	-	-	-	-	2	-	1
Kansas.....	-	-	-	-	-	-	-	3	5	2	11
SOUTH ATLANTIC.....	3	-	-	6	1	-	15	83	95	6	83
Delaware.....	-	-	-	-	-	-	-	4	4	-	-
Maryland.....	-	-	-	-	-	-	3	8	12	1	2
Dist. of Columbia..	-	-	-	-	-	-	-	1	2	-	-
Virginia.....	-	-	-	4	-	-	-	4	6	1	3
West Virginia.....	-	-	-	-	-	-	-	11	11	-	-
North Carolina.....	1	-	-	1	1	-	2	17	6	-	50
South Carolina.....	-	-	-	-	-	-	-	4	2	-	13
Georgia.....	-	-	-	-	-	-	-	17	35	-	8
Florida.....	2	-	-	1	-	-	10	17	17	4	7
EAST SOUTH CENTRAL...	8	-	1	-	-	-	-	93	92	2	4
Kentucky.....	7	-	-	-	-	-	-	43	49	-	1
Tennessee.....	1	-	-	-	-	-	-	29	22	-	-
Alabama.....	-	-	1	-	-	-	-	11	9	2	3
Mississippi.....	-	-	-	-	-	-	-	10	12	-	-
WEST SOUTH CENTRAL...	4	1	-	2	-	-	1	116	80	2	7
Arkansas.....	-	-	-	-	-	-	-	18	-	-	2
Louisiana.....	1	-	-	2	-	-	-	28	15	2	5
Oklahoma.....	-	-	-	-	-	-	-	5	12	-	-
Texas*.....	3	1	-	-	-	-	1	65	53	-	-
MOUNTAIN.....	-	-	-	3	-	-	1	47	46	-	20
Montana.....	-	-	-	2	-	-	-	4	8	-	-
Idaho.....	-	-	-	-	-	-	-	2	3	-	-
Wyoming.....	-	-	-	-	-	-	-	-	-	-	-
Colorado.....	-	-	-	-	-	-	-	17	19	-	18
New Mexico.....	-	-	-	1	-	-	-	1	3	-	1
Arizona.....	-	-	-	-	-	-	-	9	7	-	1
Utah.....	-	-	-	-	-	-	1	5	6	-	-
Nevada.....	-	-	-	-	-	-	-	9	-	-	-
PACIFIC.....	14	-	-	2	4	3	45	240	200	4	84
Washington.....	2	-	-	1	-	-	-	21	9	-	-
Oregon.....	2	-	-	-	1	-	-	18	7	1	2
California.....	9	-	-	1	3	3	45	198	182	3	74
Alaska.....	-	-	-	-	-	-	-	1	2	-	-
Hawaii.....	1	-	-	-	-	-	-	2	-	-	8
Puerto Rico.....	-	-	-	-	-	-	-	13	9	-	-

\*Delayed reports: Brucellosis: Tex. 2 (1968)

Diphtheria: Tex. 2 (1968)

Hepatitis, infectious: Me. 4, N.J. delete 2

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES

FOR WEEKS ENDED

FEBRUARY 15, 1969 AND FEBRUARY 17, 1968 (7th WEEK) CONTINUED

AREA	MEASLES (Rubeola)			MENINGOCOCCAL INFECTIONS, TOTAL			MUMPS	POLIOMYELITIS			RUBELLA
		Cumulative			Cumulative			Total	Paralytic		
	1969	1969	1968	1969	1969	1968		1969	1969	Cum. 1969	
UNITED STATES...	508	2,515	3,497	78	545	581	2,261	1	1	2	838
NEW ENGLAND.....	30	118	130	3	18	32	330	-	-	1	50
Maine.*.....	-	2	7	-	1	2	31	-	-	1	6
New Hampshire.....	-	6	17	-	-	2	-	-	-	-	-
Vermont.....	-	-	-	-	-	1	110	-	-	-	-
Massachusetts.*....	6	34	65	2	9	13	123	-	-	-	30
Rhode Island.....	2	2	1	1	3	4	-	-	-	-	-
Connecticut.....	22	74	40	-	5	10	66	-	-	-	14
MIDDLE ATLANTIC.....	75	644	411	6	66	69	80	-	-	-	31
New York City.....	46	405	69	-	14	13	23	-	-	-	9
New York, Up-State..	9	55	233	1	14	4	NN	-	-	-	7
New Jersey.*.....	10	77	80	-	18	23	57	-	-	-	15
Pennsylvania.....	10	107	29	5	20	29	NN	-	-	-	-
EAST NORTH CENTRAL...	53	261	968	10	72	61	525	-	-	-	222
Ohio.....	4	31	91	3	20	15	36	-	-	-	8
Indiana.....	7	50	117	2	10	9	70	-	-	-	45
Illinois.....	17	47	467	1	8	11	101	-	-	-	25
Michigan*.....	13	38	61	3	28	20	125	-	-	-	89
Wisconsin.....	12	95	232	1	6	6	193	-	-	-	55
WEST NORTH CENTRAL...	12	59	84	2	24	28	243	-	-	-	64
Minnesota.....	-	-	2	-	6	5	-	-	-	-	2
Iowa.....	8	31	21	-	3	2	219	-	-	-	55
Missouri.....	-	-	4	-	8	4	2	-	-	-	1
North Dakota.....	-	2	38	-	-	1	12	-	-	-	6
South Dakota.....	-	-	3	-	-	3	NN	-	-	-	-
Nebraska.....	4	26	9	-	2	1	10	-	-	-	-
Kansas.....	-	-	7	2	5	12	-	-	-	-	-
SOUTH ATLANTIC.....	81	468	272	19	111	130	134	-	-	-	95
Delaware.....	1	3	-	-	3	-	4	-	-	-	10
Maryland.....	1	2	20	6	14	9	9	-	-	-	13
Dist. of Columbia..	-	-	4	-	2	3	-	-	-	-	-
Virginia.*.....	19	117	42	3	18	12	12	-	-	-	13
West Virginia.....	4	31	71	-	3	3	61	-	-	-	30
North Carolina.....	4	35	33	1	12	28	NN	-	-	-	-
South Carolina.....	8	36	7	3	14	22	4	-	-	-	1
Georgia.....	-	-	2	3	18	17	-	-	-	-	-
Florida.....	44	244	93	3	27	36	44	-	-	-	28
EAST SOUTH CENTRAL...	3	26	80	6	24	46	83	-	-	-	77
Kentucky.....	1	7	31	-	6	12	41	-	-	-	3
Tennessee.....	1	5	15	4	15	14	37	-	-	-	31
Alabama.....	-	-	20	1	2	9	4	-	-	-	31
Mississippi.....	1	14	14	1	1	11	1	-	-	-	12
WEST SOUTH CENTRAL...	224	746	824	8	71	150	286	1	1	1	100
Arkansas.*.....	-	2	-	-	8	7	11	-	-	-	-
Louisiana.....	-	1	1	4	24	36	-	-	-	-	-
Oklahoma.....	96	101	42	-	2	31	5	-	-	-	4
Texas.....	128	642	781	4	37	76	270	1	1	1	96
MOUNTAIN.....	5	47	135	3	18	6	162	-	-	-	49
Montana.....	-	-	5	-	-	1	16	-	-	-	1
Idaho.....	-	-	6	-	2	2	3	-	-	-	2
Wyoming.....	-	-	24	-	-	-	-	-	-	-	-
Colorado.*.....	-	6	45	2	3	2	30	-	-	-	15
New Mexico.....	3	19	23	-	4	-	60	-	-	-	1
Arizona.*.....	2	21	29	1	6	1	47	-	-	-	29
Utah.....	-	-	1	-	1	-	6	-	-	-	1
Nevada.....	-	1	2	-	2	-	-	-	-	-	-
PACIFIC.....	25	146	593	21	141	59	418	-	-	-	150
Washington.....	-	8	186	4	7	9	174	-	-	-	54
Oregon.*.....	2	33	148	-	4	5	3	-	-	-	16
California.....	23	101	239	17	127	43	233	-	-	-	69
Alaska.....	-	4	-	-	-	-	1	-	-	-	-
Hawaii.....	-	-	20	-	3	2	10	-	-	-	11
Puerto Rico.....	16	71	42	-	2	3	14	-	-	-	1

\*Delayed reports: Measles: Mass. delete 1, N. J. 2, Va. 35 (1968) 51 (1969), Ariz. delete 9, Ore. delete 1

Meningococcal infections: Ark. 1 (1968), Colo. 1

Mumps: Me. 9, Mich. 3

Rubella: Me. 1, Ore. 1

## Morbidity and Mortality Weekly Report

TABLE III. CASES OF SPECIFIED NOTIFIABLE DISEASES: UNITED STATES  
FOR WEEKS ENDED  
FEBRUARY 15, 1969 AND FEBRUARY 17, 1968 (7th WEEK) CONTINUED

AREA	STREPTOCOCCAL SORE THROAT & SCARLET FEVER	TETANUS		TULAREMIA		TYPHOID FEVER		TYPHUS FEVER TICK-BORNE (Rky. Mt. Spotted)		RABIES IN ANIMALS	
	1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969	1969	Cum. 1969
UNITED STATES...	11,202	4	12	1	10	7	32	-	1	70	410
NEW ENGLAND.....	1,223	-	-	-	-	-	-	-	-	-	2
Maine*.....	25	-	-	-	-	-	-	-	-	-	1
New Hampshire.....	-	-	-	-	-	-	-	-	-	-	-
Vermont.....	34	-	-	-	-	-	-	-	-	-	1
Massachusetts.....	374	-	-	-	-	-	-	-	-	-	-
Rhode Island.....	-	-	-	-	-	-	-	-	-	-	-
Connecticut.....	790	-	-	-	-	-	-	-	-	-	-
MIDDLE ATLANTIC.....	563	1	1	-	1	-	2	-	-	2	5
New York City.....	15	-	-	-	1	-	1	-	-	-	-
New York, Up-State.....	437	1	1	-	-	-	1	-	-	2	5
New Jersey.....	NN	-	-	-	-	-	-	-	-	-	-
Pennsylvania.....	111	-	-	-	-	-	-	-	-	-	-
EAST NORTH CENTRAL...	978	-	3	-	-	1	1	-	-	3	17
Ohio.....	128	-	-	-	-	1	1	-	-	-	1
Indiana.....	207	-	-	-	-	-	-	-	-	-	3
Illinois.....	191	-	1	-	-	-	-	-	-	3	4
Michigan.....	327	-	2	-	-	-	-	-	-	-	-
Wisconsin.....	125	-	-	-	-	-	-	-	-	-	9
WEST NORTH CENTRAL...	378	-	-	-	1	-	-	-	-	19	65
Minnesota.....	27	-	-	-	-	-	-	-	-	6	15
Iowa.....	115	-	-	-	-	-	-	-	-	3	13
Missouri.....	4	-	-	-	1	-	-	-	-	7	23
North Dakota.....	118	-	-	-	-	-	-	-	-	2	12
South Dakota.....	36	-	-	-	-	-	-	-	-	-	-
Nebraska.....	3	-	-	-	-	-	-	-	-	-	-
Kansas.....	75	-	-	-	-	-	-	-	-	1	2
SOUTH ATLANTIC.....	1,299	2	3	-	2	-	2	-	-	21	136
Delaware.....	21	-	-	-	-	-	-	-	-	-	-
Maryland.....	266	-	-	-	-	-	-	-	-	-	-
Dist. of Columbia*	3	-	1	-	-	-	-	-	-	-	-
Virginia.....	411	-	-	-	-	-	-	-	-	17	97
West Virginia.....	245	-	-	-	2	-	-	-	-	1	15
North Carolina.....	25	1	1	-	-	-	1	-	-	-	-
South Carolina.....	94	1	1	-	-	-	1	-	-	-	-
Georgia.....	6	-	-	-	-	-	-	-	-	1	11
Florida.....	228	-	-	-	-	-	-	-	-	2	13
EAST SOUTH CENTRAL...	1,827	-	-	-	2	1	3	-	1	7	74
Kentucky.....	302	-	-	-	-	-	-	-	-	3	46
Tennessee.....	1,346	-	-	-	2	-	2	-	1	4	22
Alabama.....	96	-	-	-	-	-	-	-	-	-	6
Mississippi.....	83	-	-	-	-	1	1	-	-	-	-
WEST SOUTH CENTRAL...	844	-	2	1	2	3	6	-	-	10	50
Arkansas.....	16	-	-	-	-	2	5	-	-	-	2
Louisiana.....	5	-	1	-	-	-	-	-	-	-	3
Oklahoma.....	53	-	1	1	2	-	-	-	-	2	8
Texas.....	770	-	-	-	-	1	1	-	-	8	37
MOUNTAIN.....	2,450	-	-	-	2	1	11	-	-	-	12
Montana.....	54	-	-	-	-	-	-	-	-	-	-
Idaho.....	153	-	-	-	-	-	-	-	-	-	-
Wyoming.....	461	-	-	-	-	-	5	-	-	-	3
Colorado.....	1,331	-	-	-	-	-	1	-	-	-	1
New Mexico.....	187	-	-	-	1	1	1	-	-	-	4
Arizona.....	156	-	-	-	-	-	3	-	-	-	1
Utah.....	108	-	-	-	1	-	-	-	-	-	-
Nevada.....	-	-	-	-	-	-	1	-	-	-	3
PACIFIC.....	1,640	1	3	-	-	1	7	-	-	8	49
Washington.....	904	-	-	-	-	-	-	-	-	-	-
Oregon.....	99	-	-	-	-	-	-	-	-	-	-
California.....	503	1	3	-	-	1	7	-	-	8	49
Alaska.....	19	-	-	-	-	-	-	-	-	-	-
Hawaii.....	115	-	-	-	-	-	-	-	-	-	-
Puerto Rico.....	5	-	-	-	-	-	-	-	-	2	3

\*Delayed reports: SST: Me. 15, D.C. 31, Wyo. 22

Week No.  
7

TABLE IV. DEATHS IN 122 UNITED STATES CITIES FOR WEEK ENDED FEBRUARY 15, 1969

(By place of occurrence and week of filing certificate. Excludes fetal deaths)

Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes	Area	All Causes		Pneumonia and Influenza All Ages	Under 1 year All Causes
	All Ages	65 years and over				All Ages	65 years and over		
NEW ENGLAND:	755	473	65	30	SOUTH ATLANTIC:	1,224	647	83	45
Boston, Mass.-----	254	144	22	10	Atlanta, Ga.-----	146	73	13	10
Bridgeport, Conn.-----	39	28	2	2	Baltimore, Md.-----	217	123	8	2
Cambridge, Mass.-----	30	20	11	2	Charlotte, N. C.-----	54	25	1	4
Fall River, Mass.-----	29	20	1	1	Jacksonville, Fla.-----	78	33	11	5
Hartford, Conn.-----	59	38	4	4	Miami, Fla.-----	112	62	2	1
Lowell, Mass.-----	33	26	4	1	Norfolk, Va.-----	70	30	6	1
Lynn, Mass.-----	24	15	2	-	Richmond, Va.-----	90	50	6	5
New Bedford, Mass.-----	25	13	1	1	Savannah, Ga.-----	39	17	7	2
New Haven, Conn.-----	44	26	1	2	St. Petersburg, Fla.-----	100	82	6	-
Providence, R. I.-----	62	40	4	2	Tampa, Fla.-----	87	51	17	2
Somerville, Mass.-----	18	11	2	1	Washington, D. C.-----	189	78	5	10
Springfield, Mass.-----	49	31	3	1	Wilmington, Del.-----	42	23	1	3
Waterbury, Conn.-----	13	10	1	1					
Worcester, Mass.-----	76	51	7	2	EAST SOUTH CENTRAL:	708	379	62	58
MIDDLE ATLANTIC:	3,334	2,016	172	110	Birmingham, Ala.-----	112	60	3	6
Albany, N. Y.-----	41	24	2	1	Chattanooga, Tenn.-----	63	28	8	7
Allentown, Pa.-----	40	28	9	1	Knoxville, Tenn.-----	50	38	9	2
Buffalo, N. Y.-----	149	87	5	5	Louisville, Ky.-----	129	73	16	16
Camden, N. J.-----	42	28	7	2	Memphis, Tenn.-----	165	81	12	17
Elizabeth, N. J.-----	36	28	-	-	Mobile, Ala.-----	36	18	3	3
Erie, Pa.-----	39	25	3	-	Montgomery, Ala.-----	42	20	4	4
Jersey City, N. J.-----	60	37	3	2	Nashville, Tenn.-----	111	61	7	3
Newark, N. J.-----	75	42	3	2					
New York City, N. Y.-----	1,757	1,064	76	48	WEST SOUTH CENTRAL:	1,244	633	66	83
Paterson, N. J.-----	44	31	3	1	Austin, Tex.-----	50	26	6	2
Philadelphia, Pa.-----	405	226	3	19	Baton Rouge, La.-----	33	19	2	2
Pittsburgh, Pa.-----	178	101	16	5	Corpus Christi, Tex.-----	28	17	1	2
Reading, Pa.-----	80	55	5	4	Dallas, Tex.-----	175	93	10	5
Rochester, N. Y.-----	117	82	13	7	El Paso, Tex.-----	40	14	4	11
Schenectady, N. Y.-----	27	17	2	-	Fort Worth, Tex.-----	98	48	3	11
Scranton, Pa.-----	35	22	1	1	Houston, Tex.-----	255	117	9	12
Syracuse, N. Y.-----	97	61	6	3	Little Rock, Ark.-----	77	37	6	6
Trenton, N. J.-----	54	24	8	6	New Orleans, La.-----	151	79	3	5
Utica, N. Y.-----	24	14	3	3	Oklahoma City, Okla.-----	89	44	3	3
Yonkers, N. Y.-----	34	20	4	-	San Antonio, Tex.-----	130	72	7	14
					Shreveport, La.-----	60	35	11	5
EAST NORTH CENTRAL:	2,645	1,530	102	141	Tulsa, Okla.-----	58	32	1	5
Akron, Ohio-----	72	35	-	4					
Canton, Ohio-----	26	18	2	3	MOUNTAIN:	395	250	19	21
Chicago, Ill.-----	736	416	28	40	Albuquerque, N. Mex.-----	36	21	2	2
Cincinnati, Ohio-----	172	105	6	5	Colorado Springs, Colo.-----	32	22	6	2
Cleveland, Ohio-----	197	94	7	8	Denver, Colo.-----	137	86	4	9
Columbus, Ohio-----	147	77	4	16	Ogden, Utah-----	15	13	1	-
Dayton, Ohio-----	88	58	2	2	Phoenix, Ariz.-----	72	45	1	3
Detroit, Mich.-----	340	191	9	11	Pueblo, Colo.-----	20	11	1	-
Evansville, Ind.-----	54	43	2	-	Salt Lake City, Utah-----	53	30	4	3
Flint, Mich.-----	55	29	5	4	Tucson, Ariz.-----	30	22	-	2
Fort Wayne, Ind.-----	50	27	5	5					
Gary, Ind.-----	42	21	3	4	PACIFIC:	1,673	1,142	56	60
Grand Rapids, Mich.-----	46	37	3	1	Berkeley, Calif.-----	22	16	-	-
Indianapolis, Ind.-----	129	76	3	13	Fresno, Calif.-----	42	28	2	1
Madison, Wis.-----	44	21	5	6	Glendale, Calif.-----	35	33	-	1
Milwaukee, Wis.-----	166	109	1	8	Honolulu, Hawaii-----	47	27	1	4
Peoria, Ill.-----	35	28	4	2	Long Beach, Calif.-----	88	55	2	3
Rockford, Ill.-----	35	21	6	2	Los Angeles, Calif.-----	500	424	15	18
South Bend, Ind.-----	41	21	5	2	Oakland, Calif.-----	105	57	1	4
Toledo, Ohio-----	110	65	2	2	Pasadena, Calif.-----	34	24	1	1
Youngstown, Ohio-----	60	38	-	3	Portland, Oreg.-----	118	82	3	6
					Sacramento, Calif.-----	53	30	1	2
WEST NORTH CENTRAL:	831	519	45	29	San Diego, Calif.-----	100	60	3	3
Des Moines, Iowa-----	56	42	3	-	San Francisco, Calif.-----	195	98	10	4
Duluth, Minn.-----	23	16	3	1	San Jose, Calif.-----	54	40	2	-
Kansas City, Kans.-----	47	28	2	1	Seattle, Wash.-----	157	89	8	9
Kansas City, Mo.-----	150	101	10	5	Spokane, Wash.-----	70	45	5	2
Lincoln, Nebr.-----	23	16	1	1	Tacoma, Wash.-----	53	34	2	2
Minneapolis, Minn.-----	112	62	7	8					
Omaha, Nebr.-----	75	42	1	3	Total	12,809	7,589	670	577
St. Louis, Mo.-----	230	140	10	6					
St. Paul, Minn.-----	57	38	-	-	Cumulative Totals				
Wichita, Kans.-----	58	34	8	4	including reported corrections for previous weeks				
					All Causes, All Ages-----			106,401	
					All Causes, Age 65 and over-----			61,537	
					Pneumonia and Influenza, All Ages-----			8,258	
					All Causes, Under 1 Year of Age-----			4,724	

## TRICHINOSIS - (Continued from page 55)

were present, and trichinosis was included in the differential diagnosis. A skin test was positive for trichinosis and a muscle biopsy revealed trichina larvae.

Epidemiologic investigation disclosed that 1 week prior to the family illnesses, all members had eaten raw hamburger sandwiches. During the next 3 weeks following the illness, none of the family had eaten pork or raw beef. The hamburger was purchased from a market that had a single grinder for pork and beef in the cold room. The grinder was cleaned once or twice each week. Circumstantial evidence suggests that the raw hamburger was probably adulterated with infected pork and was the vehicle of infection.

Because all the family ate the raw hamburger and had similar illnesses at the same time, trichinosis was diagnosed retrospectively for the rest of the family when trichinosis was diagnosed in the father; however, sera were not available for confirmation.

(Reported by H. Grant Skinner, M.D., State Epidemiologist, Wisconsin Division of Health; Lyle Franzen, M.D., Health Officer, Waukesha County; John A. Harris, M.D., Waukesha, Wisconsin; and Raymond L. Schofield, M.D., New Berlin, Wisconsin.)

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CHIEF, EPIDEMIOLOGY PROGRAM  
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